

DEPARTMENT OF THE ARMY
Omaha District, Corps of Engineers
106 South 15th Street
Omaha, Nebraska 68102-1618

:NOTICE: Failure to acknowledge : Solicitation No. DACW45 02 B 0010
:all amendments may cause rejec- :
:tion of the bid. See FAR : Date of Issue: 28 March 2002
:52.214-3 of Section 00100 : NEW Date of Opening: 07 May 2002

Amendment No. 0003
26 April 2002

SUBJECT: Amendment No. 0003 to Specifications and Drawings for Construction of
Sioux Falls Flood Control, Phase 1C, Sioux Falls, SD
Solicitation No. DACW45 02 B 0010.

TO: Prospective Bidders and Others Concerned

1. The specifications and drawings for subject project are hereby modified as follows (revise all specification indices, attachment lists, and drawing indices accordingly).

a. Specifications. (Descriptive Changes.)

(1) Pages 00010-1, delete date and time of bid opening shown and substitute "07 May 2002" at "2:00 p.m.".

(2) Page 00010-1, item 11, delete "180 calendar days" and substitute "500 calendar days".

(3) Section 00800 Page 2, paragraph 1.1, line 4, delete "180 calendar days" and substitute "500 calendar days"

b. Specifications (New and/or Revised and Reissued). Delete and substitute or add specification pages as noted below. The substituted pages are revised and reissued with this amendment.

<u>Pages Deleted</u>	<u>Pages Substituted or Added</u>
SECTION 15106	SECTION 15106
SLIDE GATE FOR	SLIDE GATE FOR
INTERCEPTOR SEWER LOCATION	INTERCEPTOR SEWER LOCATION

c. Drawings (Not Reissued). The following drawing sheet is revised as indicated below with latest revision date of 26 April 2002. This drawing is not reissued with this amendment.

(1) Sheet U10, In Pipe Encasement Detail, delete note at upper left reading "NEW V.C.P. TO SDR 35 PVC POWER SEAL **3521** CPLG OR APPROVED EQUAL" and substitute "NEW V.C.P. TO SDR 35 PVC POWER SEAL **3541** CPLG OR APPROVED EQUAL".

2. This amendment is a part of the bidding papers and its receipt shall be acknowledged on the Standard Form 1442. All other conditions and requirements

of the specifications remain unchanged. If the bids have been mailed prior to receiving this amendment, you will notify the office where bids are opened, in the specified manner, immediately of its receipt and of any changes in your bid occasioned thereby.

a. Hand-Carried Bids shall be delivered to the U.S. Army Corps of Engineers, Omaha District, Contracting Division (Room 301), 106 South 15th Street, Omaha, Nebraska 68102-1618.

b. Mailed Bids shall be addressed as noted in Item 8 on Page 00010-1 of Standard Form 1442.

3. Bids will be received until 2:00 p.m., local time at place of bid opening, 07 May 2002.

U.S. Army Engineer District, Omaha
Corps of Engineers
106 South 15th Street
Omaha, Nebraska 68102-1618

26 April 2002
MFS/4411

SECTION 15106
SLIDE GATE FOR INTERCEPTOR SEWER LOCATION

PART 1 GENERAL

1.1 SUMMARY

- A. This section covers slide gates for the Interceptor Sewer Location portion of this project and in general includes the following:
 - 1. Slide Gate with Electric Operator and Accessories.
- B. Measurement and Payment: Lump sum.

1.2 REFERENCES

- A. ASTM A126 - Gray Iron Castings for Valve Flanges, and Pipe Fittings.
- B. ASTM A276 - Stainless and Heat-Resistant Steel Bars and Shapes.
- C. ASTM B32 - Solder Metal.
- D. ASTM B98 - Copper-Silicon Alloy Rod, Bar and Shapes.
- E. ASTM B139 - Phosphor Bronze Rod, Bar and Shapes.
- F. ASTM B209 - Aluminum and Aluminum Alloy Sheet and Plate.
- G. ASTM B584 - Standard Specification for Copper Alloy Sand Castings for General Applications.
- H. AWWA C501 - Cast-Iron Sluice Gates.
- I. NEMA 250 - Enclosures for Electrical Equipment.
- J. NEMA ICS 6 - Enclosures for Industrial Control and System.

1.3 SUBMITTALS: Submittals shall be in accordance with the provisions of Section 01330

- B. Submit the following for approval as appropriate for each valve provided.

SD-03 Product Data

Outline and Installation Drawings; G-ED

Outline and installation drawings for equipment and fixtures furnished.

Equipment Performance Data; G-ED

Equipment performance data and operating characteristics.

Manufacturer's Catalog Data; G-ED

Manufacturer's catalog data, marked to indicate materials being furnished as standard equipment, fixtures, specialties, and accessories.

SD-02 Shop Drawings

Shop Drawing; G-ED

Shop drawings on shop-fabricated systems.

Drawings showing arrangement of piping, controls, and accessory equipment furnished.

SD-07 Certificates

Manufacturer's Certificates; G-ED

Manufacturer's Certificate: Submit For Information Only, written certification that products meet or exceed specified requirements.

SD-10 Operation and Maintenance Data

O & M Manual; G-ED

Operation and Maintenance manual data shall be submitted in accordance with Section 01730.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Delivery shall be in accordance with the following:
 - 1. Arrange delivery of products in accordance with construction schedules and to allow inspection prior to installation.
 - 2. Coordinate deliveries to avoid conflict with conditions at site.
 - 3. Deliver products in undamaged condition in original containers or packaging, with identifying labels intact and legible.
 - 4. Clearly mark to identify partial deliveries of component parts to facilitate assembly.
- B. Storage shall be in accordance with the following:
 - 1. Store products immediately on delivery and protect until installed. Storage to be done according to manufacturer's instructions with seals and labels intact and legible.
 - 2. Provide platforms, blocking or skids, or coverings required to protect products from deterioration or damage.
 - 3. Arrange storage in a manner to provide easy access for inspection.
 - 4. Maintain storage conditions to prevent deterioration or damage.
 - 5. Protect products after installation to prevent damage from subsequent operations. Remove when no longer needed.
- C. Handling shall be in accordance with the following:
 - 1. Provide equipment and personnel necessary to handle products by methods to prevent damage to products or packaging.
 - 2. Handle products by methods to prevent bending or overstepping.

1.5 SERVICE REPRESENTATIVE

- A. Provide qualified service representative to perform functions described in Section 01450.
- B. Valve and operator installation shall include one trip by the Manufacturer's representative consisting of an 8-hour work day on-site (travel time not included) for startup and training of operations personnel.
- C. Any additional trips required by the Contractor before or after final startup and training shall not be charged to the Owner.

1.6 COORDINATION

- A. Coordinate work with other Contractors.

PART 2 PRODUCTS

2.1 SLIDE GATE

A. General:

1. The slide gate shall be by same manufacturer as the sluice gates.
2. Slide gate shall be stainless steel, non-self-contained.
3. The slide gate shall be designed for embedding frame into concrete channel.
4. Assembled slide gate shall be completely shop tested for proper seating.
5. Size and Quantity: 66" channel width x 60" height - one required.

B. Materials of Construction

1. All materials used in construction of the gates and appurtenances shall be the best suited for highly corrosive raw sewage application and shall confirm to the following specifications:

<u>Item</u>	<u>ASTM Material</u>
a. Frame, rails, cover slides (disc) and yokes.	Stainless Steel A-276, Type 316
b. Stems and stem guides	Stainless Steel A-276, Type 316
c. Fasteners and anchor bolts	Stainless Steel A-276, Type 316
d. Flush bottom seals	Material suited for extended use in highly corrosive raw sewage
e. Paint	Compatible with *Epoxy Finish Coats, See notes #1 and #2 below

Note #1: Surface Preparation for paint shall be SP10.

Note #2: Field touch-up shall be performed as required.

C. Frame and Guides

The gate frame shall be rigid, welded unit, with a clear opening the same size as the waterway. The guides shall be of structural steel shapes. The guides will be of sufficient length to support two-thirds (2/3) the height of the slide, when the gate is fully open.

D. Disc (Slide Cover)

The slide cover shall be plate reinforced with structural shapes welded to the plate. The slide cover shall not deflect more than 1/360 of the span of the gate under maximum head. The stem connection shall be either the clevis type, with structural members welded to the slide and a bolt to act as a pivot pin, or a threaded and bolted (or keyed) thrust nut supported in welded nut pocket. The clevis or pocket and yolk of the gate shall be capable of taking, without damage, at least twice the rated thrust output of the operator at 40 pounds pull.

E. Stem

The stems shall be as required for intended service, of suitable length and ample strength. The stem diameter shall be capable of withstanding twice the rated output of the operator at 40 pound pull, and shall be supported such that the L/r ratio for the unsupported part of the stem shall not exceed 200.

2.2 OPERATORS

A. General

1. Provide operators (lifts) in accordance with AWWA C501 and as modified in this Section.
2. Provide each operator with a clear plastic stem cover.
3. Provide each operator with an indicator showing open and close positions in 1" gradation.

B. Electric Operator (for Slide Gate)

1. Provide electric motor-operated lift mechanism including electric motor, reduction gearing, stem nut, pedestal, torque and limit switches, enclosure space heaters, pushbutton controls, indicator lights, shop wiring, gear case, and handwheel for manual operation in case of power failure.
2. Unit shall be complete in a NEMA 4X enclosure requiring only the field connection of 3 PH, 460 V electric power.
3. Gate operation speed: 15 minute fully open to fully closed.

2.3 MANUFACTURERS

A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable:

1. Rodney Hunt.
2. Waterman.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Installation shall be performed by qualified craftsmen in accordance with manufacturers recommendations, Installation Manual (furnished by manufacturer), and as shown on Drawings.
- B. Location, orientation, and quantities shall be as shown on Drawings.
- C. Provide all required related items necessary for a complete installation.
- D. Surface preparation shall follow the piping surface preparation specification. Contractor shall be responsible for compatibility of manufacturers shop coating with final finish.

3.2 SLIDE GATE SCHEDULE

ID #	Qty	Size W"xH"	Maximum Seating Head (Ft.)	Maximum Unseating Head (Ft.)	Installation Type	Operator
101A	1	66" x 60"	5	0	Channel Mounted	Electric

END OF SECTION 15106